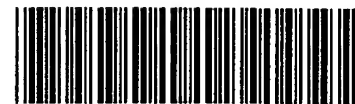


Serial Number: 10/066,127

CRF Processing Date: 5/30/2002
Edited by: AS
Verified by: AS (STIC staff)

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;
☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____



OIPE

RAW SEQUENCE LISTING

DATE: 05/30/2002

PATENT APPLICATION: US/10/066,127

TIME: 07:53:08

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\05302002\J066127.raw

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3 <110> APPLICANT: HYBRIGENICS
4   Pierre, LEGRAIN
6 <120> TITLE OF INVENTION: Identification of the Anti-s28 Factor in Helicobacter
pylori, in
7   Campylobacter jejuni and in Pseudomonas aeruginosa and Application Thereof
9 <130> FILE REFERENCE: B4797A
11 <140> CURRENT APPLICATION NUMBER: US 10/066,127
12 <141> CURRENT FILING DATE: 2002-01-31
14 <150> PRIOR APPLICATION NUMBER: US 60/265,465
15 <151> PRIOR FILING DATE: 2001-01-31
17 <160> NUMBER OF SEQ ID NOS: 29
19 <170> SOFTWARE: PatentIn version 3.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 90
23 <212> TYPE: DNA
24 <213> ORGANISM: Helicobacter pylori
26 <220> FEATURE:
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28 <222> LOCATION: (1)..(90)
29 <223> OTHER INFORMATION: the Selected Interacting Domain (SID(r)) of HP1122
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33 atcaagaaag cgattgaaaa taaccagtat aaaatcaact tgcattgagac ttctcacaaa      60
35 atggcaaagg atttattggg gataagctag                                     90
38 <210> SEQ ID NO: 2
39 <211> LENGTH: 29
40 <212> TYPE: PRT
41 <213> ORGANISM: Helicobacter pylori
43 <220> FEATURE:
W--> 44 <221> NAME/KEY: SID1122
45 <222> LOCATION: (1)..(29)
46 <223> OTHER INFORMATION:
49 <400> SEQUENCE: 2
51 Ile Lys Lys Ala Ile Glu Asn Asn Gln Tyr Lys Ile Asn Leu His Glu
52 1           5           10           15
55 Thr Ser His Lys Met Ala Lys Asp Leu Leu Gly Ile Ser
56           20           25
59 <210> SEQ ID NO: 3
60 <211> LENGTH: 177
61 <212> TYPE: DNA
62 <213> ORGANISM: Helicobacter pylori
64 <220> FEATURE:
W--> 65 <221> NAME/KEY: SID1032
66 <222> LOCATION: (1)..(177)
67 <223> OTHER INFORMATION: the Selected Interacting Domain (SID(r)) HP1032

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70 <400> SEQUENCE: 3
71 aaagcgctga atcaaatgag cgaagagag caaatcctta tccagcttta ttactttgaa      60
73 gagttgaatt tgagcgagat taaagagatt ttaggcatta ctgaatcgcg catttctcaa      120
75 atcattaaaag aagtgattaa aaaggtgcgt aaatccttag gagtggatca tggctga      177
78 <210> SEQ ID NO: 4
79 <211> LENGTH: 58
80 <212> TYPE: PRT
81 <213> ORGANISM: Helicobacter pylori
83 <220> FEATURE:
W--> 84 <221> NAME/KEY: SID1032
85 <222> LOCATION: (1)..(58)
86 <223> OTHER INFORMATION:
89 <400> SEQUENCE: 4
91 Lys Ala Leu Asn Gln Met Ser Glu Arg Glu Gln Ile Leu Ile Gln Leu
92 1          5          10          15
95 Tyr Tyr Phe Glu Glu Leu Asn Leu Ser Glu Ile Lys Glu Ile Leu Gly
96          20          25          30
99 Ile Thr Glu Ser Arg Ile Ser Gln Ile Ile Lys Glu Val Ile Lys Lys
100         35          40          45
103 Val Arg Lys Ser Leu Gly Val Asp His Gly
104         50          55
107 <210> SEQ ID NO: 5
108 <211> LENGTH: 231
109 <212> TYPE: DNA
110 <213> ORGANISM: Helicobacter pylori
112 <220> FEATURE:
W--> 113 <221> NAME/KEY: HP1122
114 <222> LOCATION: (1)..(231)
115 <223> OTHER INFORMATION: the ORF of sigma28 factor
118 <400> SEQUENCE: 5
119 atgaatatca aattaaagga ttttacaatg attaatgccg tttcttctct tgctccggtg      60
121 cagtcttttg ggaattataa gcggtgtggaa agaataaaaa aagttgaaaa caatgaggcc      120
123 gctcttgata gggtagctga gatcaagaaa gcgattgaaa ataaccagta taaaatcaac      180
125 ttgcatgaga cttctcacia aatggcaaag gatttattgg ggataagcta g          231
128 <210> SEQ ID NO: 6
129 <211> LENGTH: 76
130 <212> TYPE: PRT
131 <213> ORGANISM: Helicobacter pylori
133 <220> FEATURE:
W--> 134 <221> NAME/KEY: HP1122
135 <222> LOCATION: (1)..(76)
136 <223> OTHER INFORMATION:
139 <400> SEQUENCE: 6
141 Met Asn Ile Lys Leu Lys Asp Phe Thr Met Ile Asn Ala Val Ser Ser
142 1          5          10          15
145 Leu Ala Pro Val Gln Ser Leu Gly Asn Tyr Lys Arg Val Glu Lys Asn
146          20          25          30
149 Glu Lys Val Glu Asn Asn Glu Ala Ala Leu Asp Arg Val Ala Glu Ile
150         35          40          45

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153 Lys Lys Ala Ile Glu Asn Asn Gln Tyr Lys Ile Asn Leu His Glu Thr
154      50                      55                      60
157 Ser His Lys Met Ala Lys Asp Leu Leu Gly Ile Ser
158 65                      70                      75
161 <210> SEQ ID NO: 7
162 <211> LENGTH: 768
163 <212> TYPE: DNA
164 <213> ORGANISM: Helicobacter pylori
166 <220> FEATURE:
W--> 167 <221> NAME/KEY: HP1032
168 <222> LOCATION: (1)..(768)
169 <223> OTHER INFORMATION: The ORF of anti sigma 28 factor
172 <400> SEQUENCE: 7
173 atgattttga tgatggaaaa tagaatgccc aaaggaattc aaaaaactga aacaagcgaa      60
175 aaaaatatag aaaaggtttt gaacgcctat gataagcaac aacaccacca tcaagacgat      120
177 ctcgctattc agtattttacc agccgtgccc gccatggcgt ttcgtctaaa agagcgcttg      180
179 cccagctcta ttgatttttaa cgatctggtt tctattggca ctgaagaatt gattaaatta      240
181 gccaggcggt atgagagcgc gttaaacgat tctttttggg ggtatgcgaa gactcgtgtc      300
183 aatggggcga tgttagatta tttgcgctct ttagatgtga tttctcgtc tagcaggaaa      360
185 ctcattaaaa gcattgatat tgaaatcacc aaacacctta atgagcatgg gaaagagcct      420
187 agcgatgcgt atttagcgca aactttaggc gaaaatattg aaaaaattaa agaagccaaa      480
189 acggcttcag atatttatgc gttagtgcc atagatgaac aattcaatgc gattgagcaa      540
191 gatgaaatca ctaaaaaaat tgaagcagaa gagttgttag agcatgtcca aaaagcgctg      600
193 aatcaaatga gcgaaagaga gcaaatacct atccagcttt attactttga agagttgaat      660
195 ttgagcgaga ttaaagagat tttaggcatt actgaatcgc gcatttctca aatcattaaa      720
197 gaagtgatta aaaaggtgcg taaatcctta ggagtggatc atggctga      768
200 <210> SEQ ID NO: 8
201 <211> LENGTH: 255
202 <212> TYPE: PRT
203 <213> ORGANISM: Helicobacter pylori
205 <220> FEATURE:
W--> 206 <221> NAME/KEY: HP1032
207 <222> LOCATION: (1)..(255)
208 <223> OTHER INFORMATION:
211 <400> SEQUENCE: 8
213 Met Ile Leu Met Met Glu Asn Arg Met Pro Lys Gly Ile Gln Lys Thr
214 1                      5                      10                      15
217 Glu Thr Ser Glu Lys Asn Ile Glu Lys Val Leu Asn Ala Tyr Asp Lys
218      20                      25                      30
221 Gln Gln His His His Gln Asp Asp Leu Ala Ile Gln Tyr Leu Pro Ala
222      35                      40                      45
225 Val Arg Ala Met Ala Phe Arg Leu Lys Glu Arg Leu Pro Ser Ser Ile
226      50                      55                      60
229 Asp Phe Asn Asp Leu Val Ser Ile Gly Thr Glu Glu Leu Ile Lys Leu
230 65                      70                      75                      80
233 Ala Arg Arg Tyr Glu Ser Ala Leu Asn Asp Ser Phe Trp Gly Tyr Ala
234      85                      90                      95
237 Lys Thr Arg Val Asn Gly Ala Met Leu Asp Tyr Leu Arg Ser Leu Asp
238      100                     105                     110

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RAW SEQUENCE LISTING

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241 Val Ile Ser Arg Ser Ser Arg Lys Leu Ile Lys Ser Ile Asp Ile Glu
242      115      120      125
245 Ile Thr Lys His Leu Asn Glu His Gly Lys Glu Pro Ser Asp Ala Tyr
246      130      135      140
249 Leu Ala Gln Thr Leu Gly Glu Asn Ile Glu Lys Ile Lys Glu Ala Lys
250 145      150      155      160
253 Thr Ala Ser Asp Ile Tyr Ala Leu Val Pro Ile Asp Glu Gln Phe Asn
254      165      170      175
257 Ala Ile Glu Gln Asp Glu Ile Thr Lys Lys Ile Glu Ala Glu Glu Leu
258      180      185      190
261 Leu Glu His Val Gln Lys Ala Leu Asn Gln Met Ser Glu Arg Glu Gln
262      195      200      205
265 Ile Leu Ile Gln Leu Tyr Tyr Phe Glu Glu Leu Asn Leu Ser Glu Ile
266      210      215      220
269 Lys Glu Ile Leu Gly Ile Thr Glu Ser Arg Ile Ser Gln Ile Ile Lys
270 225      230      235      240
273 Glu Val Ile Lys Lys Val Arg Lys Ser Leu Gly Val Asp His Gly
274      245      250      255

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277 <210> SEQ ID NO: 9

278 <211> LENGTH: 65

279 <212> TYPE: PRT

280 <213> ORGANISM: Campylobacter jejuni

282 <220> FEATURE:

W--> 283 <221> NAME/KEY: Cj1464

284 <222> LOCATION: (1)..(65)

285 <223> OTHER INFORMATION: Cj1464 protein

288 <400> SEQUENCE: 9

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290 Met Ile Asn Pro Ile Gln Gln Ser Tyr Val Ala Asn Thr Ala Leu Asn
291 1      5      10      15
294 Thr Asn Arg Ile Asp Lys Glu Thr Lys Thr Asn Asp Thr Gln Lys Thr
295      20      25      30
298 Glu Asn Asp Lys Ala Ser Lys Ile Ala Glu Gln Ile Lys Asn Gly Thr
299      35      40      45
302 Tyr Lys Ile Asp Thr Lys Ala Thr Ala Ala Ala Ile Ala Asp Ser Leu
303      50      55      60
306 Ile
307 65

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310 <210> SEQ ID NO: 10

311 <211> LENGTH: 107

312 <212> TYPE: PRT

313 <213> ORGANISM: Pseudomonas aeruginosa

315 <220> FEATURE:

W--> 316 <221> NAME/KEY: PA3351

317 <222> LOCATION: (1)..(107)

318 <223> OTHER INFORMATION: PA3351 protein

321 <400> SEQUENCE: 10

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323 Met Val Ile Asp Phe Asn Arg Leu Asn Pro Gly Ser Thr Pro Ala Thr
324 1      5      10      15
327 Thr Gly Arg Thr Gly Ser Thr Ala Ala Gly Arg Pro Asp Ala Thr Gly

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/066,127

DATE: 05/30/2002

TIME: 07:53:08

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\05302002\J066127.raw

```

328          20          25          30
331 Ala Asp Lys Ala Gly Gln Ala Ala Thr Ser Ala Pro Lys Ser Gly Glu
332          35          40          45
335 Ser Val Gln Ile Ser Glu Thr Ala Gln Asn Met Gln Lys Val Thr Asp
336          50          55          60
339 Gln Leu Gln Thr Leu Pro Val Val Asp Asn Asp Lys Val Ala Arg Ile
340 65          70          75          80
343 Lys Gln Ala Ile Ala Asp Gly Thr Tyr Gln Val Asp Ser Glu Arg Val
344          85          90          95
347 Ala Ser Lys Leu Leu Asp Phe Glu Ser Gln Arg
348          100          105
351 <210> SEQ ID NO: 11
352 <211> LENGTH: 32
353 <212> TYPE: DNA
354 <213> ORGANISM: Artificial sequence
356 <220> FEATURE:
357 <223> OTHER INFORMATION: primer PCR 1550
359 <400> SEQUENCE: 11
360 catgagatct ctataaaaac agagcggcta aa 32
363 <210> SEQ ID NO: 12
364 <211> LENGTH: 42
365 <212> TYPE: DNA
366 <213> ORGANISM: Artificial sequence
368 <220> FEATURE:
369 <223> OTHER INFORMATION: primer PCR 1551
371 <400> SEQUENCE: 12
372 tgacgcatgc actagtcata tgatgttcct tgttttttga tg 42
375 <210> SEQ ID NO: 13
376 <211> LENGTH: 42
377 <212> TYPE: DNA
378 <213> ORGANISM: artificial sequence
380 <220> FEATURE:
381 <223> OTHER INFORMATION: linker
383 <400> SEQUENCE: 13
384 tgacgcatgc actagtcata tgatgttcct tgttttttga tg 42
387 <210> SEQ ID NO: 14
388 <211> LENGTH: 22
389 <212> TYPE: DNA
390 <213> ORGANISM: artificial sequence
392 <220> FEATURE:
393 <223> OTHER INFORMATION: primer PCR 2386
395 <400> SEQUENCE: 14
396 gctcggtacc cgggtgacta ac 22
399 <210> SEQ ID NO: 15
400 <211> LENGTH: 27
401 <212> TYPE: DNA
402 <213> ORGANISM: artificial sequence
404 <220> FEATURE:
405 <223> OTHER INFORMATION: primer PCR 2387

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/066,127

DATE: 05/30/2002

TIME: 07:53:09

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L:84 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4
L:113 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:5
L:134 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6
L:167 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7
L:206 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:283 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:9
L:316 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:10